



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,053	05/06/2004	Anand S. Bedekar	CE10624R	6638
22917 7590 04/30/2008 MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			EXAMINER TAHA, SHAQ	
			ART UNIT 2146	PAPER NUMBER
			NOTIFICATION DATE 04/30/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.Schaumburg@motorola.com
APT099@motorola.com

Office Action Summary	Application No. 10/840,053	Applicant(s) BEDEKAR ET AL.	
	Examiner SHAQ TAHA	Art Unit 2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 13, and 16 - 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a final action for application number 10/840,053 based on after non-final filed on 10/16/2007. The original application was filed on 05/06/2004. Claims 1 - 20 are currently pending and have been considered below. Claims 1, 9, and 13 are independent claims.

Response to Arguments

The applicant argues that Ramasubramani et al. (US 6,314,108) does not focus on or provide any information on the persistent connections between the proxy and the servers that supply the objects requested by the users.

The examiner disagrees, Ramasubramani et al. (US 6,314,108) teaches centralized network access for wireless network carriers providing network access to wireless communication devices. Ramasubramani focuses on connections between proxy and users and between proxy and servers, wherein proxy is shown in Fig. 2, Ref # 214.

Ramasubramani provides information on persistent connections 208, 210, and 212 as shown in Fig. 2, wherein users 202, 204, and 206 request information from internet 216, wherein controller 214 delivers requested information from servers 218, and 220 over the internet through persistent connections to users 202, 204, and 206.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 7 – 9, 11 – 13, and 16 – 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ramasubramani et al. (US 6,314,108).

Regarding claim 1, Ramasubramani teaches an apparatus for use in facilitating access with a distributed network, the apparatus comprising: a plurality of persistent connections between the apparatus and one or more servers in a network, **[Fig. 2, (Ref # 208, 210, 212 are persistent connections in a communication system) & (Ref # 218, 220 which are servers in the communication system)]**; communication ports coupled with the persistent connections, **[Fig. 9, communication ports 918, and 924 are coupled with persistent connections 920, and 926]**; where at least one of the communication ports receive requests for objects from users wherein the objects are from the one or more servers, **[Fig. 9, Ref # 918 which is a communication port that forwards the message to the users]**; and a controller wherein the controller controls communications over the persistent connections, **[Fig. 2, Ref # 214, which is a gateway that has a controller that controls the communication over the connections]**;

allocates the requests to the plurality of persistent connections and for transmission to the one or more servers, **[Fig. 2, users 202, 204, and 206 seek information from application server located on the internet 216 through persistent connections 208, 210, and 212];**

receives the requested objects over the plurality of persistent connections, **[Fig. 2, users 202, 204, and 206 request information from the internet 216 over persistent connections 208, 210, and 212];**

and orders delivery of the objects received from the one or more servers to the users, **[Fig. 2, users 202, 204, and 206 retrieve information from the internet through controller 214 which orders delivery of information to users 202, 204, and 206].**

Regarding claim 2, Ramasubramani teaches the apparatus wherein the controller dynamically adjusts the number of persistent connections between the apparatus and a first server of the one or more servers in the network, **[Fig. 2, Ref # 214, 216, The Multi-network gateway that controls the connections to the internet 214, and servers 218, and 220].**

Regarding claim 4, Ramasubramani teaches the apparatus wherein the controller activates an additional persistent connection when an additional request is received for a second server of the one or more servers and one or more persistent connections are not idle, **[Fig. 6, Request between Ref # 204 & 210, Connections between Ref # 210 & 604, 608];**

and allocates the additional request to the additional persistent connection for transmission to the second server, **[Fig. 6, where the request is routed from Ref # 204 to 210 then 604].**

Regarding claim 5, Ramasubramani teaches the apparatus wherein more than one persistent connection between the apparatus and a third server of the one or more servers exists, and the controller allocates the requests plurality of for the third server to one or more persistent connections persistent connections to the third server such that the requests are routed transmitted to the third server over the persistent connections having lightest loads. **[Fig. 8A, The processing load on the push agent 802 is reduced].**

Regarding claim 7, Ramasubramani teaches that the apparatus further comprising: a load tracker coupled with at least one of the communication ports, **[Fig. 9, Ref # 906, where the router plays the role of a load tracker]**; where the load tracker identifies which of the plurality of persistent connections to a fourth server has a lightest load when more than one persistent connection exists between the apparatus and the fourth server, **[Fig. 9, Ref # 906, where the router connects the connections and checks their load]**;

wherein the controller communicates with the load tracker and allocates a request for transmission to the fourth server over a persistent connection having the lightest load

according to the load tracker, **[Fig. 9, Ref # 906, which is a router that routes communication and request]**.

Regarding claim 8, Ramasubramani teaches the apparatus wherein the controller tracks priorities of the received requests, **[Fig. 5B, Ref # 556]**; and delivers the objects to the requesting user in the order of the priority, **[Fig. 5B, Ref # 554]**.

Regarding claim 9, Ramasubramani teaches a system for use in communicating data with devices, the system comprising: a proxy comprising: **[Fig. 2, Ref # 214, which the Multi-Network Gateway is considered to be a Proxy]**;

a controller providing at least some control of the proxy, **[Fig. 3, Ref # 302, 304 are Push and Pull Agents to control the Proxy]**;

a memory coupled with the controller, **[Fig. 12A, Ref # 1210, where storing the package in a session data which is memory]**;

the memory comprises a cache that stores data, **[Fig. 3, Ref # 322]**;

and a plurality of persistent connections coupled with the proxy, where the plurality of persistent connections are connections between the proxy and one or more servers over a distributed network that are activated and maintained by the proxy, **[Fig. 6, Connections between Ref # 602 & 208, between # 602 & 216 are persistent connections]**;

and a load tracker coupled with the controller, the load tracker provides load information to the controller, **[Fig. 8B, Ref # 852, which is an Air link Framework that works as a load tracker for the controllers # 802, 804];**

Regarding claim 11, Ramasubramani teaches the system wherein the proxy further comprises a persistent connection controller coupled with the plurality of persistent connections such that when an additional request is received for an object on a second server to which there is one or more persistent connections, **[Fig. 2, Ref # 214, which is a gateway that has a controller that controls the communication over the connections];**

the persistent connection controller determines whether one or more of the persistent connections to the second server is idle and activates an additional persistent connection an to the second server when no existing persistent connections to the second server are idle, **[The air link enable is used to indicate whether or not a particular air link should be activated during initialization of the multi-network gateway, (Column 7, line 53)].**

Regarding claim 12, Ramasubramani teaches the system wherein the proxy further comprises: an object identification evaluator coupled with the controller, the object identification evaluator identifies a user associated with a received object and a priority associated with the object, **[identifying an incoming request for data from the Internet from a first wireless communication device, (Column 3, line 24)];**

Art Unit: 2146

en a priority-based object router coupled with the object identification evaluator, **[Fig. 9, Ref # 906];**

where the object router routes the received object to the user as identified by the object identification evaluator based on the priority of the object as identified by the objection identification evaluator, **[Fig. 9, Ref # 906, which is a router that routes requests].**

Regarding claim 13, Ramasubramani teaches a method for use in providing client

devices with access to a distributed network, the method comprising:

establishing a plurality of persistent connections between a proxy and a first server over a distributed network, **[Fig. 2, (Ref # 208, 210, 212, which are connections in a communication system) & (Ref # 218, 220 which are servers in the communication system)];**

maintaining the plurality of persistent connections as active, **[Fig. 8A, Ref # 810, where the router maintains the requests];**

receiving a plurality of requests for objects on the first server, **[Fig. 1, the network gateway 106 is to receive data requests from the carrier network 104];**

communicating the plurality of requests over the plurality of persistent connections: and

where adjusting a number of persistent connections that are maintained as active to the

first server, **[Fig. 2, the request moves from ref # 202 over a carrier network**

through a persistent connection Ref # 208 through the proxy and controller Multi-Network Gateway].

Art Unit: 2146

Regarding claim 16, Ramasubramani teaches that further comprising:

monitoring a first persistent connection of the plurality of persistent connections; and releasing the first persistent connection when the first persistent connection is idle for a predefined period of time, **[The route table 916 can also associate each connection with the same port. Using the route table 916, the NB-router 906 can route information between the appropriate air links and the SMSC units, (Column 12, line 60)].**

Regarding claim 17, Ramasubramani teaches that the method further comprising:

receiving an additional request for an object on the first server, **[Fig. 1, the network gateway 106 is to receive data requests from the carrier network 104];**

determining loading on each of the existing persistent connections to the first server when there are one or more persistent connections to the first server, **[Fig. 8A, The processing load on the push agent 802 is reduced];**

determining when existing persistent connections to the first server are loaded beyond a threshold limit when receiving the additional request activating an additional persistent connection all of the existing persistent connections are loaded beyond a threshold limit, **[The air link enable is used to indicate whether or not a particular air link should be activated during initialization of the multi-network gateway, (Column 7, line 53)];**

Art Unit: 2146

and communicating the additional request to the first server over the additional persistent connection, **[Fig. 8A, Ref #810, where the router maintains the request and the connections]**.

Regarding claim 18, Ramasubramani teaches that the method further comprising:

receiving a first object from the first server, **[receiving a notification from the wired network that is to be directed to a first wireless communication device, (Column 19, line 54)]**;

determining that a third request is associated with the received first object,

[determining a first network driver within the network gateway that is associated with the first wireless communication device from a plurality of network drivers, (Column 19, line 18)];

and caching the first object when there is a fourth request for an object on the first server having a higher priority than the third request such that a second object is received that is associated with the fourth request having has not been received from the first server, **[Fig. 12A, Ref # 1210]**;

and delivering the first object with cached objects associated with requests having a lower priority than the third request when there are no requests with higher priority than the third request for which the objects have not been received, **[Fig. 12A, Ref # 1214]**.

Regarding claim 19, Ramasubramani teaches that the method further comprising:

receiving a third request for an object on the first server when one or more persistent

Art Unit: 2146

connections are available to the first server, **[Fig. 2, Ref # 206 is a third client that sends third request];**

determining when one or more of the plurality of active persistent connections is to the first server idle, **[The air link enable is used to indicate whether or not a particular air link should be activated during initialization of the multi-network gateway, (Column 7, line 53)];**

communicating the third request to the first server over an idle persistent connection when one or more of the plurality of active persistent connections is idle, **[Fig. 8A, Ref #810, where the router maintains the request and the connections].**

Regarding claim 20, Ramasubramani teaches that the method further comprising:

receiving an additional request for an object on the first server when one or more persistent connections exist to the first server, **[Fig. 2, Ref # 206 is a third client that sends third request];**

determining which of the one or more of plurality of persistent connections has the lightest load, **[Fig. 2, Ref # 208, where the carrier is the persistent connection with the load];**

and communicating the additional request to the first server over the persistent connection that has been determined to have with the lightest load, **[Fig. 8A, Ref #810, where the router maintains the request and the connections].**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramasubramani et al. (US 6,314,108) as applied to claims 1 above, and further in view of Boucher et al. (US 7,167,926).

Regarding claims 3, 6, and 10, Ramasubramani teaches a centralized network access for wireless network carriers providing network access to wireless communication devices, **(See Abstract)**.

Ramasubramani further teaches network gateway (or proxy server) that provides access to a network of computers to various wireless network carriers having different wireless network characteristics, **(See Abstract)**.

Ramasubramani et al. differs from the claimed invention is that an idle timer that is coupled with a controller is not taught in Ramasubramani et al.

Boucher teaches a device provides a fast-path that avoids protocol processing for most messages, greatly accelerating data transfer and offloading time-intensive processing tasks from the host CPU, **[Abstract]**.

Art Unit: 2146

Boucher further teaches an idle timer coupled with the controller, **[Column 67, line 60];** wherein the controller activates the idle timer when a first persistent connection becomes idle, and terminates the first persistent connection when a predefined time period expires before a request for an object is communicated over the first persistent connections, **[Column 67, Line 59, where maintaining the idle timer means to activate it];**

Regarding claim 6, Boucher teaches that the apparatus further comprising: a cache coupled with the communication ports, **[Column 3, line 44, where the CPU Cache is coupled with a communication];**

wherein a first received object is stored in the cache when a first request associated with the first object has a lower priority than a second request for a second object that has not been received, **[Column 3, line 44, where the CPU Cache is a storage for instructions or data or requests].**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ramasubramani by including an idle timer as taught by Boucher. One of ordinary skill in the art would have been motivated to make this modification in order to provide the advantage of maintaining an idle timer.

Conclusion

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 04/07/2008 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Shaq Taha** whose telephone number is 571-270-1921. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Jeff Put** can be reached on 571-272-6798.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

Art Unit: 2146

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

04/07/07

S. Taha

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2146

Application/Control Number: 10/840,053
Art Unit: 2146

Page 16